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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,360	09/16/2003	Hirokazu Negishi	03560.003350.	9418
5514 7590 04/05/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER CHAU, COREY P	
			ART UNIT 2615	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/662,360

Applicant(s)

NEGISHI ET AL.

Examiner

Corey P. Chau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 7-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/27/03</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

- I. Claims 1-6, drawn to a speaker system, classified in class 381, subclass 165.
- II. Claims 7-15, drawn to an active indoor low-frequency sound control method and system, classified in class 381, subclass 71.2.

1. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination can utilize any speaker system. The subcombination has separate utility such as speaker system used in a vehicle.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such

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claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

2. During a telephone conversation with John Magluyan on 1/12/2007 a provisional election was made without traverse to prosecute the invention of a speaker system, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by USPAPN 20020085723 to Boesch et al. (hereafter as Boesch).

5. Regarding Claim 1, Boesch discloses a speaker system, comprising:

air-current generating means for generating an air-current (Figs. 1-3; column pages 1-2, paragraph 0016); and

air-current modulating means for frequency-modulating the air-current generated by the air-current generating means with an audio signal to which the driving of the air-current generating means is input to generate sound waves in accordance with the audio signal (Figs. 1-3; pages 1-2, paragraph 0016).

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6384550 to Miyakawa et al. (hereafter as Miyakawa).

7. Regarding Claim 1, Miyakawa discloses a speaker system, comprising:  
air-current generating means for generating an air-current (Figs. 2, 4-6; column 3, lines 10-41; column 3, line 65 to column 4, line 59); and

air-current modulating means for frequency-modulating the air-current generated by the air-current generating means with an audio signal to which the driving of the air-current generating means is input to generate sound waves in accordance with the audio signal (Figs. 2, 4-6; column 3, lines 10-41; column 3, line 65 to column 4, line 59).

8. Regarding Claim 2, Miyakawa discloses the air-current generating means includes a pulsometer rotating device for generating an air current, and the air-current modulating means modulates the air current by changing the rotational speed of the pulsometer in one direction in accordance with the audio signal (Figs. 2, 4-6; column 3, lines 10-41; column 3, line 65 to column 4, line 59).

9. Regarding Claim 3, Miyakawa discloses the pulsometer rotating device includes an ultrasonic motor as a driving source and an acoustic pulsometer with low moment and high rigidity (Figs. 2, 4-6; column 3, line 10 to column 4, line 59).

10. Regarding Claim 4, Miyakawa discloses the form of blades/material of the pulsometer are asymmetrical with respect to the rotational direction, and the pulsometer reproduces sound waves in normal phase efficiently and can suppress the reproduction of sound waves in inverse phase (Figs. 2, 4-6; column 3, line 10 to column 4, line 59).

11. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5825901 to Hisey.

12. Regarding Claim 1, Hisey discloses a speaker system, comprising:

air-current generating means for generating an air-current (Figs. 2-8; column 5, line 24 to column 6, line 52) and

air-current modulating means for frequency-modulating the air-current generated by the air-current generating means with an audio signal to which the driving of the air-current generating means is input to generate sound waves in accordance with the audio signal (Figs. 2-8; column 5, line 24 to column 6, line 52).

13. Regarding Claim 2, Hisey discloses the air-current generating means includes a pulsometer rotating device for generating an air current, and the air-current modulating means modulates the air current by changing the rotational speed of the pulsometer in one direction in accordance with the audio signal (Figs. 2-8; column 5, line 24 to column 6, line 52).

14. Regarding Claim 3, Hisey discloses the pulsometer rotating device includes an ultrasonic motor as a driving source and an acoustic pulsometer with low moment and high rigidity (Figs. 2-8; column 5, line 24 to column 6, line 52).

15. Regarding Claim 4, Hisey discloses the form of blades/material of the pulsometer are asymmetrical with respect to the rotational direction, and the pulsometer reproduces sound waves in normal phase efficiently and can suppress the reproduction of sound waves in inverse phase (Figs. 2-8; column 5, line 24 to column 6, line 52).

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16. Regarding Claim 5, Hisey discloses the pulsometer rotating device includes an electromagnetic motor as a driving source and an acoustic pulsometer with low moment and high rigidity (Figs. 2-9; column 5, line 24 to column 6, line 52).

17. Regarding Claim 6, Hisey discloses the air-current generating means has a sound absorbing material on the back of a fan for generating air-currents (Figs. 2-9; column 5, line 24 to column 6, line 52; column 27, lines 4-9; column 32, lines 20-34).

18. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4194095 to Doi et al. (hereafter as Doi).

19. Regarding Claim 1, Doi discloses a speaker system, comprising:

air-current generating means for generating an air-current (Figs. 1-2; column 3, lines 1-59; column 4, line 46 to column 5, line 16); and

air-current modulating means for frequency-modulating the air-current generated by the air-current generating means with an audio signal to which the driving of the air-current generating means is input to generate sound waves in accordance with the audio signal (Figs. 1-2; column 3, lines 1-59; column 4, line 46 to column 5, line 16).

20. Regarding Claim 2, Doi discloses the air-current generating means includes a pulsometer rotating device for generating an air current, and the air-current modulating means modulates the air current by changing the rotational speed of the pulsometer in one direction in accordance with the audio signal (Figs. 1-2; column 3, lines 1-59; column 4, line 46 to column 5, line 16).

***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


USPN 3936606 to Wanke discloses an acoustic abatement method and apparatus.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey P. Chau whose telephone number is 571-272-7514. The examiner can normally be reached on Monday-Friday, 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 29, 2007  
CPC

  
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